3-month summary

- The chance of this period being hot is higher than normal
- However, near average temperatures remains the most likely outcome
- Greater than normal chance of impacts from hot weather such as heatwaves
- Slight increase in the likelihood of wet conditions compared to normal

3-month likelihood of impact

Temperature

5% chance the season will be COOL	60% chance the season will be NEAR AVERAGE	35% chance the season will be HOT
0.3× the normal chance	1.0× the normal chance	1.8× the normal chance

Precipitation

10% chance the season will be DRY	60% chance the season will be NEAR AVERAGE	30% chance the season will be WET
0.5× the normal chance	1.0× the normal chance	1.5× the normal chance

Wind speed

15% chance the season will be CALM	60% chance the season will be NEAR AVERAGE	25% chance the season will be WINDY
0.8× the normal chance	1.0× the normal chance	1.3× the normal chance

1-month summary

- Higher than normal chance of a warm May
- Near average or cool conditions remain possible
- The chances of either a dry or wet May are similar to normal

1-month likelihood of impact

Temperature

10% chance the month will be COOL	55% chance the month will be NEAR AVERAGE	35% chance the month will be WARM
0.5× the normal chance	0.9× the normal chance	1.8× the normal chance

Precipitation

20% chance the month will be DRY	55% chance the month will be NEAR AVERAGE	25% chance the month will be WET
1.0× the normal chance	0.9× the normal chance	1.3× the normal chance

Wind speed

20% chance the month will be CALM	60% chance the month will be NEAR AVERAGE	20% chance the month will be WINDY
1.0× the normal chance	1.0× the normal chance	1.0× the normal chance

Understanding the Outlook

The Outlook uses 3 categories for possible UK temperature, precipitation and wind speed in the next 1 and 3 months:

COOL, NEAR AVERAGE and WARM for 1-month temperature
COOL, NEAR AVERAGE and HOT for 3-month temperature
WET, NEAR AVERAGE and DRY for precipitation
CALM, NEAR AVERAGE and WINDY for wind speed

These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NEAR AVERAGE	HOT	COOL	NEAR AVERAGE	HOT	HOT	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	HOT
NEAR AVERAGE	NEAR AVERAGE	WET	NEAR AVERAGE	WET	DRY	WET	NEAR AVERAGE	NEAR AVERAGE	DRY
NEAR AVERAGE	CALM	WINDY	NEAR AVERAGE	WINDY	CALM	CALM	NEAR AVERAGE	CALM	NEAR AVERAGE

Same 1-month period over the last 10 years

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COOL	NEAR AVERAGE	COOL	NEAR AVERAGE	WARM	WARM	NEAR AVERAGE	NEAR AVERAGE	COOL	WARM
NEAR AVERAGE	WET	WET	NEAR AVERAGE	NEAR AVERAGE	DRY	NEAR AVERAGE	DRY	WET	NEAR AVERAGE
WINDY	NEAR AVERAGE	WINDY	NEAR AVERAGE	NEAR AVERAGE	CALM	CALM	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE

Outlook in context

Drivers of UK weather for May to July

The impact of global weather patterns on the UK is small through this period. Drivers relevant to the current Outlook are:
• The warming of UK climate consistent with wider global warming trends

Long-range weather predictions

The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead. Currently, signals from these centres are weak, lowering confidence in the more probable weather conditions through this period. There is, however, a small and consistent signal for high pressure to be to the north of the UK and low pressure to the south allowing winds to blow more frequently from the south and east.

Impact

Consistent with our warming climate, there is an increase in the likelihood of warmer than normal conditions. Whilst this doesn't necessarily mean heatwaves will occur, it does increase the likelihood of these compared to normal. Whilst near average rainfall remains the most likely outcome, there is an increase in the chance of wetter than normal conditions across the UK over the next three months. These trends are modest, however, and differences in rainfall locally could be large, consistent with the more showery nature of summer rainfall.

Outlook compared to normal likelihood

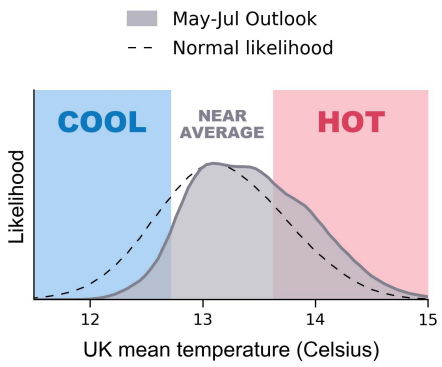
The curves below show the likelihood of the 1- and 3-month average temperature, precipitation and wind speed taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature, precipitation or wind speed at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

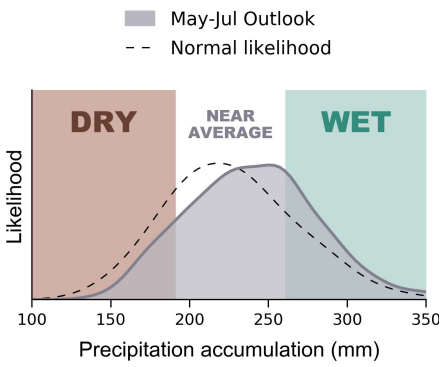
A shift of the solid curve to the left of the dashed curve indicates an increase in the chances of below-average temperature, rainfall or winds. A shift to the right, meanwhile, indicates increased chances of above-average values.

3-month temperature Outlook compared to normal



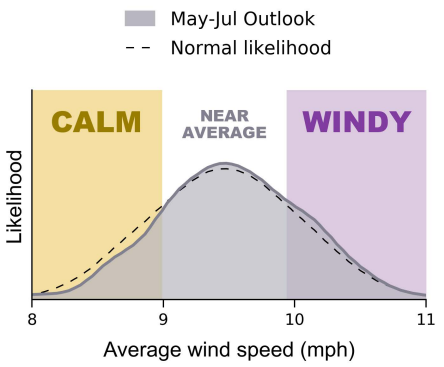
Likelihood leans towards hot

3-month precipitation Outlook compared to normal



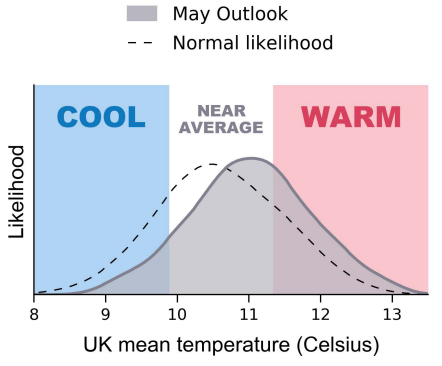
Likelihood leans moderately towards wet

3-month wind speed Outlook compared to normal



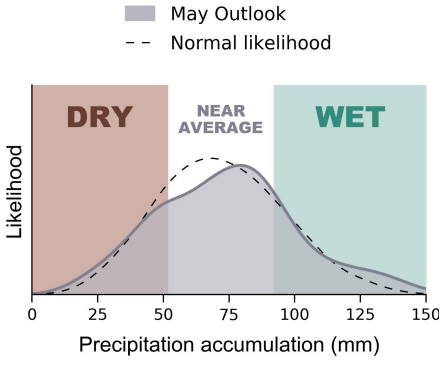
Likelihoods of calm and windy are similar

1-month temperature Outlook compared to normal



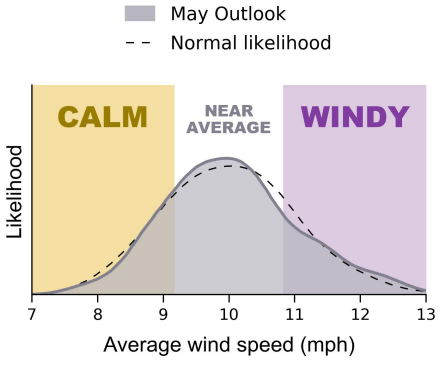
Likelihood leans towards warm

1-month precipitation Outlook compared to normal



Likelihoods of dry and wet are similar

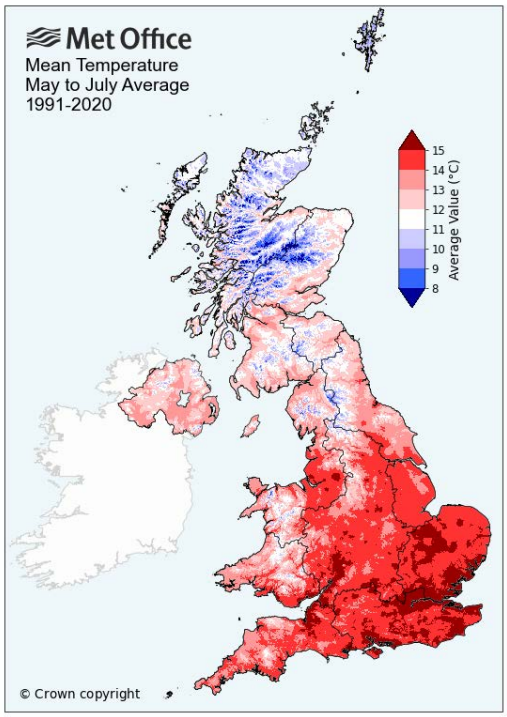
1-month wind speed Outlook compared to normal



Likelihoods of calm and windy are similar

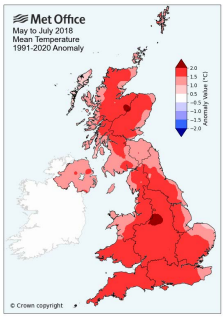
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK applicable to the 3-month Outlook period.

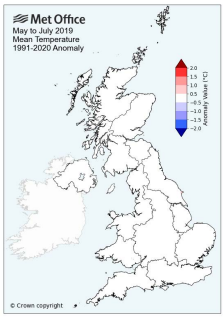


Average temperatures for May - July based on observations of past years.

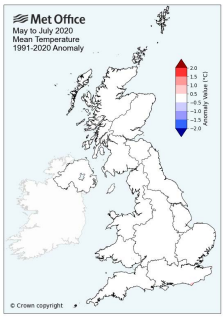
Last 5 years temperatures, difference from average (3-month)



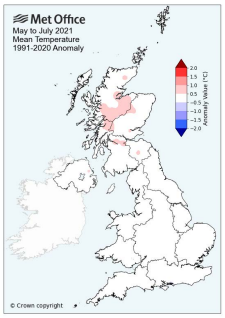
May - Jul 2018



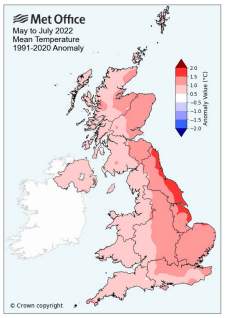
May - Jul 2019



May - Jul 2020



May - Jul 2021



May - Jul 2022

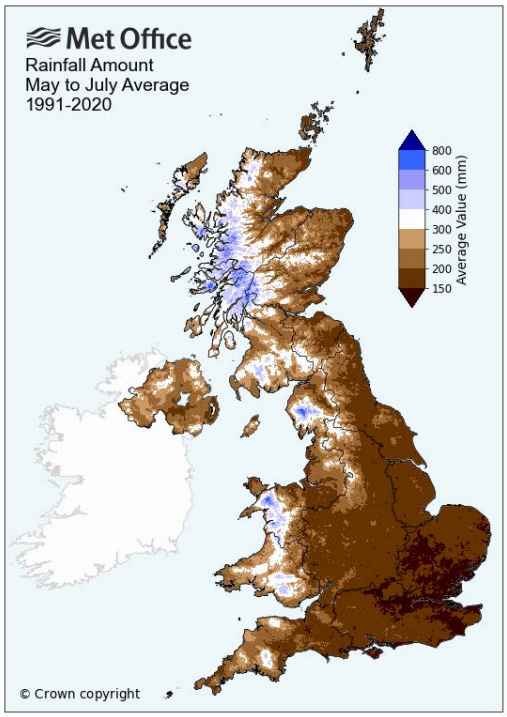
Anomaly (°C)

< -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to-0.5	-0.5 to 0.5	0.5 to 1.0	1.0 to 1.5	1.5 to 2.0	> 2.0

These maps show how May - July temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate hotter-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

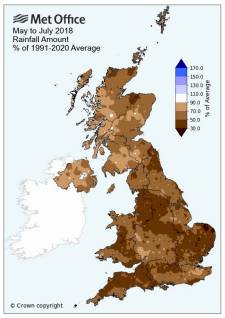
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK applicable to the 3-month Outlook period.

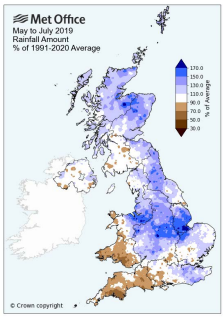


Average precipitation for May - July based on observations of past years.

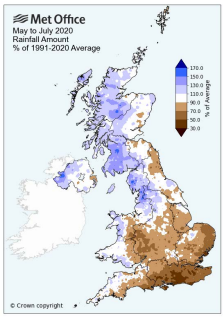
Last 5 years precipitation, difference from average (3-month)



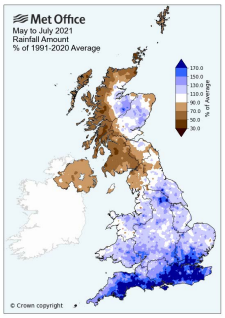
May - Jul 2018



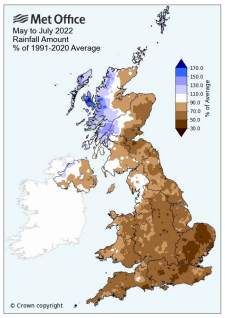
May - Jul 2019



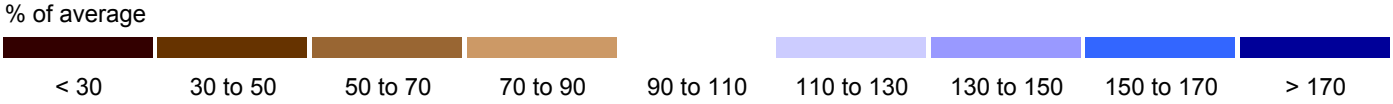
May - Jul 2020



May - Jul 2021



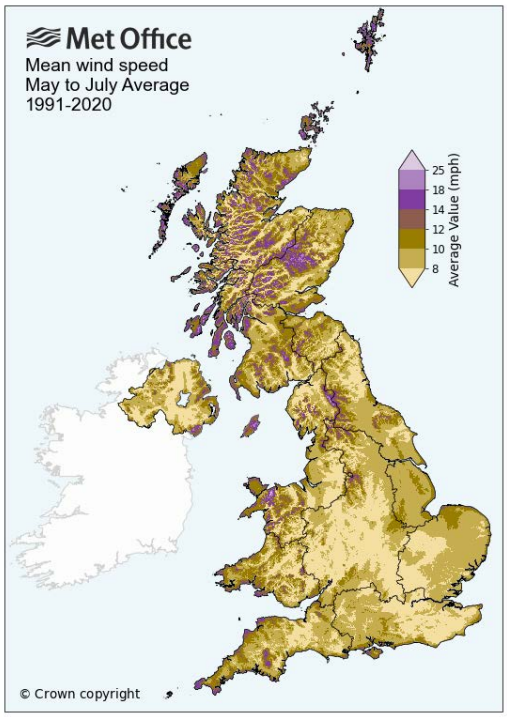
May - Jul 2022



These maps show how May - July precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

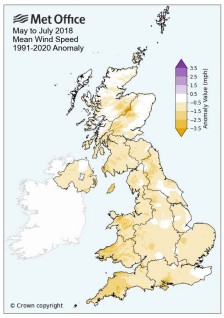
Long-term average wind speed (3-month)

This page shows the long-term average wind speed across the UK applicable to the 3-month Outlook period.

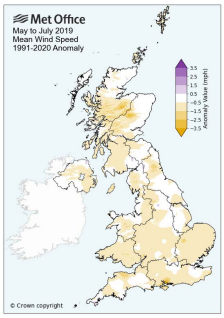


Average wind speed for May - July based on observations of past years.

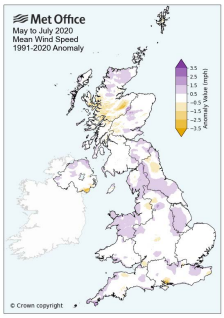
Last 5 years wind speed, difference from average (3-month)



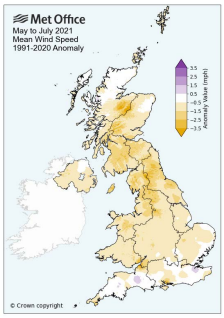
May - Jul 2018



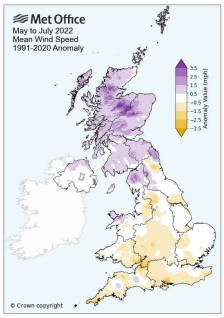
May - Jul 2019



May - Jul 2020



May - Jul 2021



May - Jul 2022

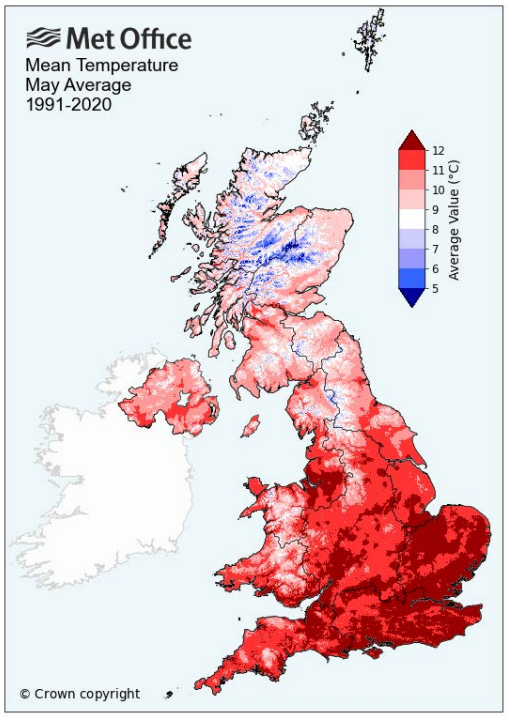
Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how May - July wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

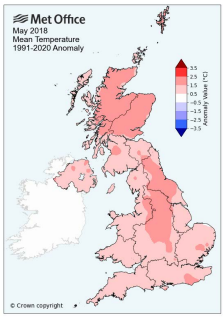
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK applicable to the 1-month Outlook period.

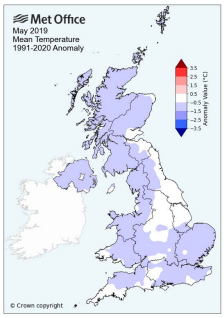


Average temperatures for May based on observations of past years.

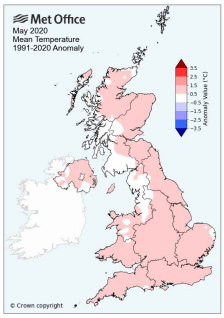
Last 5 years temperatures, difference from average (1-month)



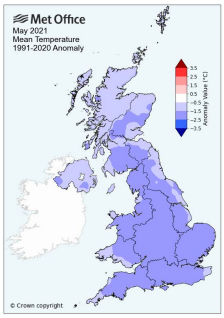
May 2018



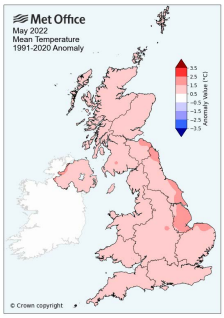
May 2019



May 2020



May 2021



May 2022

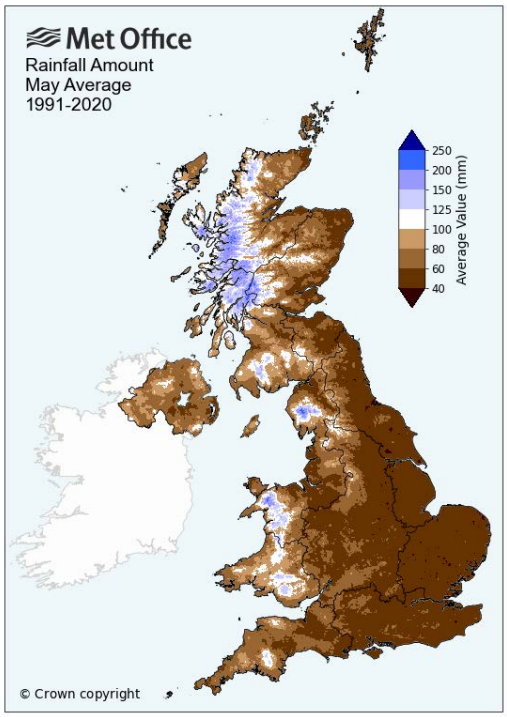
Anomaly (°C)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how May temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

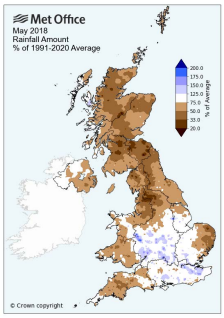
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK applicable to the 1-month Outlook period.

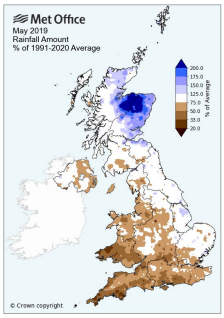


Average precipitation for May based on observations of past years.

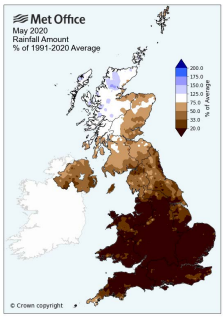
Last 5 years precipitation, difference from average (1-month)



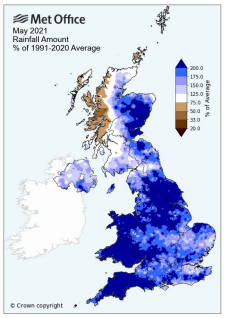
May 2018



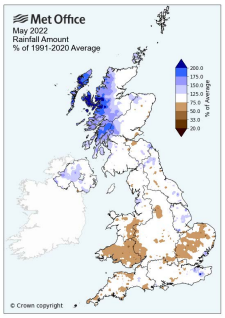
May 2019



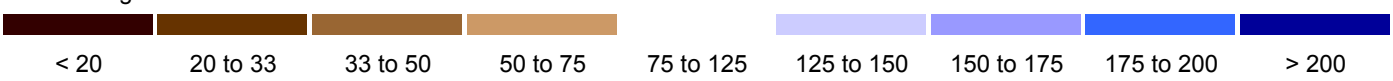
May 2020



May 2021



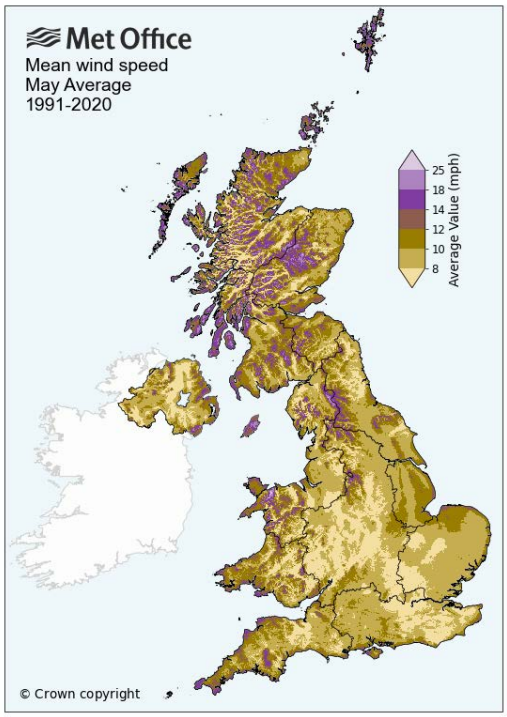
May 2022



These maps show how May precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

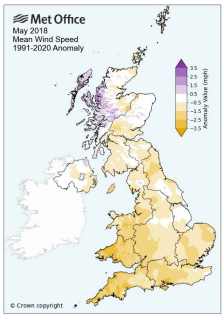
Long-term average wind speed (1-month)

This page shows the long-term average wind speed across the UK applicable to the 1-month Outlook period.

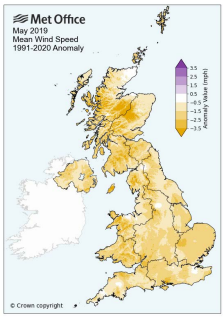


Average wind speed for May based on observations of past years.

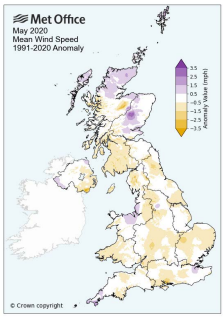
Last 5 years wind speed, difference from average (1-month)



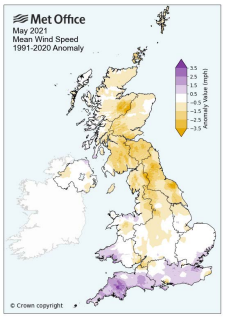
May 2018



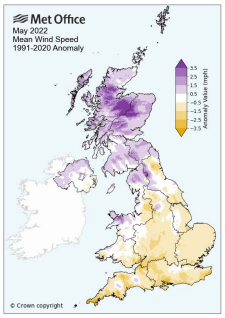
May 2019



May 2020



May 2021



May 2022

Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how May wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

Q&As

Q. What is the point of the Outlook, who is it meant for?
A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?
A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?
A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK-average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?
A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q Does the increased chance of impacts from hotter than average conditions mean we could have a heatwave?
A. An increase in the likelihood of warmer than normal conditions is consistent with our warming climate and this Outlook suggests the chances of heatwaves are higher than normal, but a range of conditions much less extreme than heatwaves are also possible. The increased chance of hot conditions could just as easily reflect a mix of hot and cool days, warm nights, or less extreme levels of warmth rather than heatwave conditions specifically. The Outlook does not guarantee prolonged hot weather and does not imply continuous heatwave conditions.

Q. Given the ongoing water management issues in some parts of the country, is there still a concern over the duration of any dry periods and associated impacts?
A. Despite the slightly increased risk of wetter than average conditions the most likely outcome is for average rainfall across the UK as a whole. Rainfall during this period is often showery in nature which could lead to significant regional variations in intensity and duration, so there is the chance that some areas could still see some drier periods. The Environment Agency, Scottish Environment Protection Agency, Natural Resources Wales, and the Northern Ireland Department for Infrastructure and Rivers, are responsible for monitoring drought risk across England, Scotland, Wales and Northern Ireland respectively.

About the Outlook

The Outlook presented here is for United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website.

In this product, temperature refers to the average of daytime maxima and night-time minima. Wind speed refers to the average wind speed at a height of 10 metres. All numerical values relate to averages (temperature, wind speed) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1991-2020.

Find out more

- UK 3-month Outlook user guidance page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/user-guidance/user-guidance
- Explainers on climate drivers (such as the El Niño Southern Oscillation and North Atlantic Oscillation) that influence seasonal forecasts and the impacts they can have on UK weather:
  https://www.metoffice.gov.uk/services/government/contingency-planners/seasonal-forecasts-and-climate-drivers-resources
- Contingency planners page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/index

Contact us

Website:
www.metoffice.gov.uk

Email:
enquiries@metoffice.gov.uk

Provide your feedback

We would like to hear your feedback on the UK 3-month Outlook to understand how it is being used. Please fill in the short form using this link or QR code to share your thoughts.